



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,481	09/01/2005	Theodore H Kregel	60562-003	2194

27305 7590 05/20/2008
HOWARD & HOWARD ATTORNEYS, P.C.
THE PINEHURST OFFICE CENTER, SUITE #101
39400 WOODWARD AVENUE
BLOOMFIELD HILLS, MI 48304-5151

EXAMINER

BOCHNA, DAVID

ART UNIT	PAPER NUMBER
----------	--------------

3679

MAIL DATE	DELIVERY MODE
-----------	---------------

05/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,481	Applicant(s) KRENGEL ET AL.	
	Examiner David E. Bochna	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10, 11 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10, 11 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 1-6 are withdrawn in view of the newly discovered reference(s) to Race, Jr. Rejections based on the newly cited reference(s) follow.
2. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

3. Claims 15, 10-11, 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15, lines 4 and 7 – it is unclear if the “a tubular sleeve” is referring to the “tubular deformable metal sleeves” recited in line 3.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-4, 6, 11 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Race, Jr.

In regard to claim 1, Race, Jr. discloses a method of forming a fluid tight coupling between the end portions of coaxially aligned metal pipes, comprising the following steps,

Art Unit: 3679

performed in sequence: inserting a metal sleeve 12 into the open ends of each of said metal pipes to be joined; rolling a groove into an outside diameter of each of said pipes 1 adjacent to but spaced from the open ends of each of said pipes, wherein said groove extends into said sleeve, locking said sleeve in said pipe (see fig. 1); and

forming a coupling 8 between said pipes by receiving a generally circular housing having a U-shaped cross-section including leg portions 9 received within said grooves retaining said pipes in coaxially aligned relation.

In regard to claim 3, wherein said method includes inserting a metal sleeve 12 into the open ends of said metal pipes formed of the same metal as said pipes (see col. 2, line 34).

In regard to claim 4, wherein said method includes inserting a metal sleeve 12 into the open ends of said metal pipes having a thickness equal to or less than said metal pipes (see fig. 1).

In regard to claim 6, wherein said method includes inserting a metal sleeve into the open ends of said metal pipes having an outside diameter generally equal to and inside diameter of said pipes forming a press fit (see fig. 1).

In regard to claim 11, wherein said sleeves are formed of the same metal as said pipes (see col. 2, line 34).

In regard to claim 15, Race Jr. discloses a coupling between opposed adjacent ends of coaxially aligned deformable metal pipes, each pipe having a circular cross-section, comprising: tubular deformable metal sleeves 12, each sleeve having a circular cross-section and an outside diameter generally equal to an inside diameter of said pipes, a tubular sleeve press fit into an end

Art Unit: 3679

of each of said pipes (see col. 2, lines 42-44), and each of said tubular sleeves having an end adjacent an end of a pipe;

a channel-shaped groove 7 rolled in an outer surface of each of said pipes and a nested channel- shaped groove in each of said tubular sleeves securely locking a tubular sleeve in each of said pipes; and

a generally circular metal housing 8 having a U-shaped cross-section including a leg portion 9 received within a channel-shaped groove in an outer surface of each of said pipes, retaining said pipes in coaxially aligned relation.

In regard to claim 16, wherein said sleeves have a constant thickness (see fig. 1).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Race, Jr. Race, Jr. discloses a groove as described above, but not that the groove has a rectangular cross-section. However, it would have been obvious to one of ordinary skill in the art to make the groove rectangular instead of circular because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Race, Jr.. Race, Jr. discloses a sleeve as described above, but not that the sleeve is thinner than the pipe. However,

Art Unit: 3679

it would have been obvious to one of ordinary skill in the art to make the sleeve of Race, Jr. thinner than the pipe because a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Race, Jr..

Race, Jr. discloses a sleeve and pipe made out of metal as described above, but not that the sleeve and pipe are made out of steel. However, it would have been obvious to one of ordinary skill in the art to make the sleeve and pipe out of steel because the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Response to Arguments

10. Applicant's arguments with respect to claims 15, 10-11, 14 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Bochna whose telephone number is (571) 272-7078. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David E. Bochna/
Primary Examiner, Art Unit 3679